

Appln No. 09/575,121
Amdt. Dated February 21, 2005
Response to Office action of January 12, 2005

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Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of processing a stored image by an effects module, said method including the steps of:
reading said stored image from a storage location to an image processor;
applying a selected effect to said stored image;
writing a resultant image to said storage location;
wherein the step of applying an effect comprises the process of image warping which includes the steps of:
constructing an image pyramid;
scaling a warp map to match said stored image;
calculating a span of said stored image pixels represented in each output pixel; and
calculating a value of an output pixel from said image pyramid.
2. (Withdrawn)
3. (Withdrawn)
4. (Withdrawn)
5. (Withdrawn)
6. (Withdrawn)
7. (Withdrawn)
8. (Withdrawn)
9. (Withdrawn)
10. (Withdrawn)

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11. (Withdrawn)

12. (Withdrawn)

13. (Withdrawn)

14. (Cancelled)

15. (Currently Amended) The method of claim ~~14~~1 wherein the step of constructing an image pyramid includes the step of performing a 3x3 convolve on 1 in 4 of said stored image pixels.

16. (Currently Amended) The method of claim ~~14~~1 wherein the step of scaling a warp map includes the steps of:
determining a corresponding position in said warp map for said output pixel;
reading said corresponding position values from lookup tables;
bi-linearly interpolating said corresponding position values to determine an actual value; and
scaling said actual values to place them in the same domain as said stored image.

17. (Original) The method of claim 16 wherein said reading step further comprises reading X values from an X warp-map lookup table and reading Y values from an Y warp-map lookup table.

18. (Original) The method of claim 17 wherein said X and Y warp-maps have a different spatial resolution from said stored image.

19. (Currently Amended) The method of claim ~~14, 16, 17 or 18~~1 wherein said warp maps are represented by 8 or 16 bit values that correspond to said stored image size.

20. (Currently Amended) The method of claim ~~14~~1 wherein said span calculation step includes the steps of:
determining the absolute distance in X and Y between one point in said warp map and two other such points;

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taking a maximum of said absolute distances to be said span.

21. (Currently Amended) The method of claim 14-1 wherein said output pixel calculation step includes the steps of:
for said span s , where $s \leq 1$, reading pixel values of said stored image around a given point and performing bi-linear interpolation; or
for said span s , where $s > 1$, reading pixel values of said stored image around a given point on two appropriate levels of said image pyramid and performing tri-linear interpolation.

22. (Withdrawn)

23. (Withdrawn)

24. (Withdrawn)

25. (Withdrawn)

26. (Withdrawn)

27. (Withdrawn)

28. (Withdrawn)

29. (Withdrawn)

30. (Withdrawn)